REMARKS

In the aforesaid Office Action, claims 1-5, 9, 16, 25, 27-33, 37-40 and 42 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Estrada et al. (U.S. Patent No. 6,193,686), and claims 1-5, 9, 16, 25, 27-33, 37-40 and 42 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Happ et al. (U.S. Patent No. 6,575,958), and claims 1-5, 9, 23-33, 35, and 37-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Verbeek (U.S. Patent No. 5,690,613) in view of Rau et al. (U.S. Patent No. 6,024,722) and in view of Samuelson et al. (U.S. Patent No. 6,165,166). Applicants note with appreciation the indication that claims 17-19 and 21 would be allowable if rewritten in independent form including all the limitations of the base and any intervening claims, and that claim 41 is allowed. Claims 1-45 are pending (new claims 43-45 being added by this amendment), and claims 6-8, 10-15, 20, 22, 34 and 36 are withdrawn from consideration.

The Examiner rejected claims 1-5, 9, 16, 25, 27-33 and 37-40 and 42 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Estrada et al., stating that Estrada et al. discloses a balloon catheter shaft having.... "a reinforcing member (27) formed of a first polymeric material (braided polyamide) having a glass transition temperature greater than the glass transition temperature of a second polymeric material (nylon 12) forming the distal portion of the proximal tubular member.

Applicants wish to note that, contrary to the Examiner's assertion, Estrada et al. does not disclose that the reinforcing member 27 is formed of braided polyimide (the Examiner appears to have been referring to the member 20 of Estrada et al. used in the previous Office Action as the reinforcing member). Estrada et al. discloses at column 5, lines 29-31, that suitable materials for the tubular reinforcing member 27 include engineering polymers such as PEEK, polyetherketone, and polyketone, and discloses at column 4, lines 2-5 that the components of the intermediate shaft section are formed of high strength polymeric materials such as PEEK, polyimide and the like.

However, in Estrada et al., member 27 does not define an inner-most surface of the shaft extending along the inflation lumen from the proximal to the distal end of the polymeric tubular reinforcing member, as required by the embodiment set forth in Applicant's claim 1. Instead, in Estrada et al., reinforcing member 27 has a proximal end which is located around the distal end of member 20 (i.e., the inner-most surface of the shaft along the inflation lumen at the proximal end of the reinforcing member 27 is defined by the member 20 and not by reinforcing member 27).

The Examiner rejected claims 1-5, 9, 16, 25, 27-33 and 37-40 and 42 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Happ et al., stating that Happ et al. discloses a balloon catheter shaft having.... "a reinforcing member (130) formed of a first polymeric material (column 5, lines 49-68) having a glass transition temperature greater than the glass transition temperature of a second polymeric material (nylon 12) forming the distal portion of the proximal inner tubular member.

However, in Happ et al., member 130 does not define an inner-most surface of the shaft extending along the inflation lumen from the proximal to the distal end of the polymeric tubular reinforcing member, as required by the embodiment set forth in Applicant's claim 1. Moreover, regarding claim 2, Happ et al. does not disclose or suggest forming member 130 of a polyimide. Instead, Happ et al. discloses at column 5, lines 49-68, forming the member 130 of PEEK, polyetherketone, polyketone, PTFE, or nylon. Moreover, regarding claim 29, Happ et al. does not disclose or suggest that reinforcing member 130 has a wall thickness of about 0.01 to about 0.03 mm. Instead, Happ et al. disclose that the member 130 has a wall thickness of about 0.004-0.008 inches (0.1-0.2 mm), an order of magnitude larger than the dimensions required by claim 29. As discussed in Applicant's specification (see 3rd paragraph of the Summary section), the polyimide provides a thin-walled reinforcing tube which nonetheless has a sufficient strength to provide the required reinforcement, with excellent dimensional stability at the processing temperature of other polymers such as polyamides and polyurethanes commonly used in catheter components, and maintains thin-walled, controlled dimensions during formation and assembly of the catheter.

The Examiner rejected claims 1-5, 9, 23-33, 35, and 37-39 under 35 U.S.C. §103(a) as being unpatentable over Verbeek in view of Rau et al. and in view of Wallace et al. Applicants have amended claim 1 to include all the limitations of claim 42.

Regarding claim 30, the references do not disclose or suggest a polymeric reinforcing tube which is within the distal portion of the proximal tubular member and which is formed of a thermoset polyimide material, with a support mandrel within at least

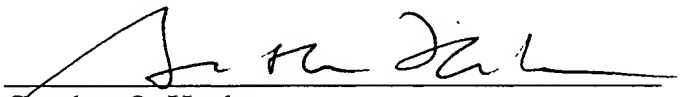
a section of the inflation lumen, having a distal section extending along an inner or outer surface of the polymeric reinforcing tube.

Applicants have added new claims 43-45, calling for a polymeric reinforcing member which is on an inner surface of a portion of the proximal tubular member located adjacent to the guidewire proximal port, and which is formed of a first polymeric material having a glass transition temperature greater than a glass transition temperature of a second polymeric material forming the portion of the proximal tubular member located adjacent to the guidewire proximal port. Support can be found in Fig. 1, and on page 14, lines 12-15.

In light of the above amendments and remarks, applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

FULWIDER PATTON LEE & UTECHT, LLP

By: 

Gunther O. Hanke
Registration No. 32,989

GOH/PMM/psm

Howard Hughes Center
6060 Center Drive, Tenth Floor
Los Angeles, CA 90045
Telephone: (310) 824-5555
Facsimile: (310) 824-9696
Customer No. 24201